

# Tattoo<sup>2</sup>



**evolis**

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## Icons

Throughout this manual, different icons highlight important information, as follows:



Indicates information that emphasizes or supplements important points of the main text.



Advises you of information that is essential to complete a task, or points out the importance of specific information in the text.



Advises you that failure to take or avoid a specific action could result in physical harm to you, or could result in physical damage to the hardware.

## Warranty Information

Refer to the Warranty booklet enclosed with your Evolis printer for terms and conditions.

## Return Materials Authorization

In order to make a warranty claim you must contact an Evolis Reseller. You will be responsible for packaging the printer for shipment and the costs of shipping and insurance of the printer from the point of use of the printer to the Evolis Reseller. The Evolis Reseller will bear the costs of shipping and insuring the printer from the repair location to the address from which the printer was shipped. Before returning any equipment for in-warranty or out-of warranty repair, contact an Evolis Reseller or an Evolis Repair Center (ERC) for a Return Materials Authorization (RMA) number. Repack the equipment in the original packing material and mark the RMA number clearly on the outside of the box. For more information about RMA or Evolis warranty statements, refer to the Warranty booklet enclosed with your Evolis printer.

## Product Disposal

WEEE Directive



This symbol indicates that when the last user wishes to discard this product, it must be sent to appropriate facilities for recovery and recycling.

By not discarding this product along with other household-type waste, the volume of waste sent to incinerators or landfills will be reduced and natural resources will be conserved. Your Evolis printer should be recycled according to your local standards. For more information, please contact Evolis at: [info@evolis.com](mailto:info@evolis.com).

# Thanks for choosing an Evolis Card Printer to personalize your badges

Using the latest printing technologies, Evolis Tattoo offers its users both performance and quality.

Evolis Tattoo combines user-oriented design, compact size and ease of use. It is fully adapted to small runs and fields such as identification, loyalty and leisure.

The 'Evolis Genuine Product' line of consumables linked to the printer was specifically developed and optimized to guarantee the best quality of printing.

Using these consumables increases the lifespan of your badges and of your Evolis printer.

As for all Evolis products, particular care has been used in writing this manual. But if an error has still managed to slip into these pages without our wanting it, please let us know by sending an e-mail to [info@evolis.com](mailto:info@evolis.com). Evolis will then do everything in its power to correct the problem and give you complete satisfaction.

# Tattoo<sup>2</sup>

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# Install the Evolis printer

*The aim of this first part is to assist you, step-by-step, in discovering your new printer and putting it to work for you. By taking the time to review these few pages, you will get more detailed knowledge about your printer and its capabilities, while optimizing the time needed to install and start using the product.*

## **Technology and benefits**

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Evolis Tattoo is specially designed for users requiring simplicity and quality of printing for their personalization of badges in monochrome or color.

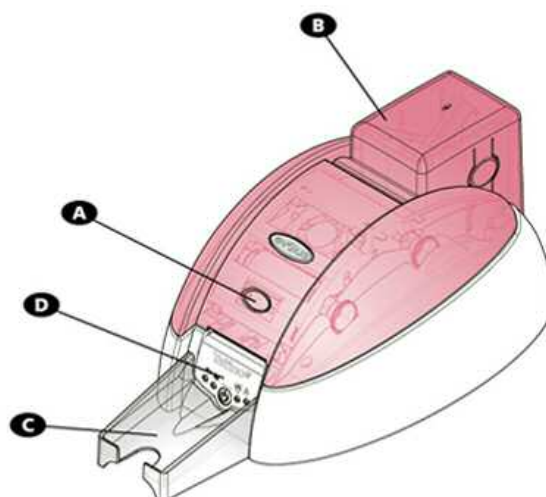
In a few seconds, the Tattoo personalizes your pre-printed or blank plastic cards, and prints your texts, barcodes, graphics, logos and pictures.

Truly flexible, this printer can be used for batch printing with the 100-card feeder, or “over-the counter” runs, with cards inserted manually, one after the other.

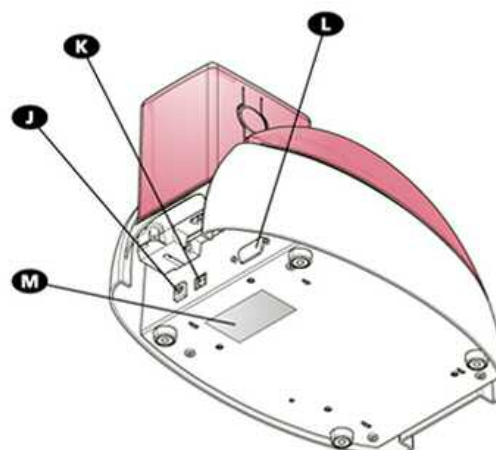
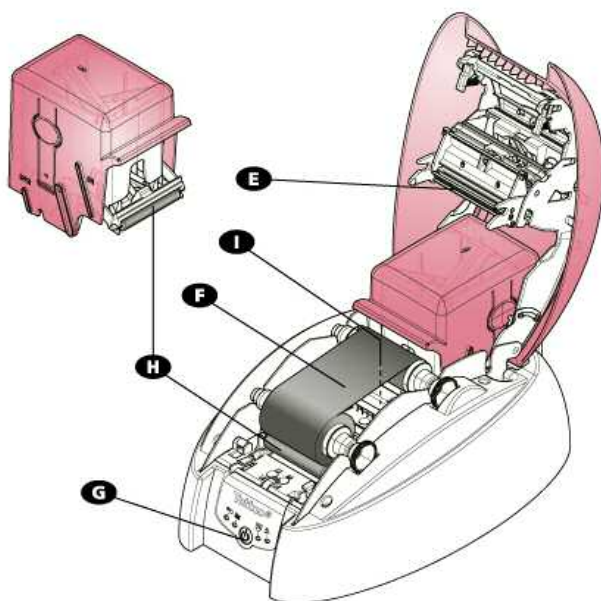
Tattoo is one of the most compact of all plastic card printers, and can be integrated in all types of environment: offices, bank receptions, shop counters.

Evolis Tattoo suits perfectly applications such as professional and business cards, identification badges (employees, visitors...), membership cards, and event cards.

In addition, it perfectly fits applications such as loyalty cards and transportation passes.



- |  |   |
|--|---|
| <b>A Cover lever</b>                     | Enables the printer cover to be opened and closed.  |
| <b>B Card Feeder</b>                     | Receives the cards for printing.  |
| <b>C Detachable output hopper</b>        | Collects the printed and/or encoded cards.  |
| <b>D Control Panel</b>                   | Shows the printer activity.   |
| <b>E Thermal print head</b>              | Enables the cards to be printed in 300 dpi.   |
| <b>F Ribbon</b>                          | Monochrome or color ribbon (cf consumable list).  |
| <b>G Push button</b>                     | Shows the printer activity (power ON/OFF).  |
| <b>H Cleaning roller</b>                 | Removes all dust before the cards are printed.  |
| <b>I Magnetic encoding head (option)</b> | Enables cards with magnetic tracks 1, 2 and 3 to be encoded.  |
| <b>J Power supply connector</b>          | Enables the printer to be connected to its power supply.  |
| <b>K USB computer connector (std)</b>    | Enables data to be received and sent "from" and "to" the computer.  |
| <b>L DB-9 connector(s) (option)</b>      | Enables data to be received and sent "from" and "to" the computer, or a coupler to be connected for chip cards personalization. |
| <b>M Identification label</b>            | Indicates the model and the serial number of the printer.   |



# Install your printer

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The Evolis printer must be set up in a dry, well-ventilated location protected against dust and air currents.

In addition, make sure you install your printer on a sturdy flat surface that can support its weight of around 2.4 kg (5.3 lbs).

Finally, it is essential to allow free access to the connectors and to the power plug.

## Check the items shipped

The Evolis printer is shipped with a set of accessories that we invite you to examine.

Please take note that this list may vary in terms of the geographic area where you are located.

The printer is shipped in an original container specially designed to ensure that the product is protected against any risk of damage during shipment.

In the event of visible damage at the time of delivery, do not hesitate to carry out all required steps as far as the shipper is concerned, and immediately contact your Evolis dealer who will provide you with all necessary assistance.

Evolis has paid particular attention to the quality of this shipping material, and we urge you to keep it in a clean, dry space.



*This packaging material will be required to return equipment.*

*During the manufacturer's guarantee period, returning material without the original Evolis packaging could cause you to lose the benefit of this guarantee !*

### The following parts are furnished with your Evolis printer:

- Power supply unit - VP ELECTRONIQUE or SWITCHBOX Type F10723-A or FDF0503-A
- Main power cable
- USB cable (length 1:80 m) - Item # A5017
- CD-Rom Drivers & Documentations
- CD-Rom eMedia Card Designer Trial Version 30 days.
- Cleaning kit
- Evolis Limited Guarantee document (must be consulted)
- Quick start

In the absence of one of these components, please contact your Evolis dealer.



*Only use the power supply delivered with your Tattoo*

*VP ELECTRONIQUE or SWITCHBOX Type F10723-A or VP ELECTRONIQUE Type EA10723*



*Only use the same type of USB cable as the one delivered with your Tattoo.*



## Pre-installation activation

Before installing the printer, please perform the following operations:

### Connect the printer to the main power supply



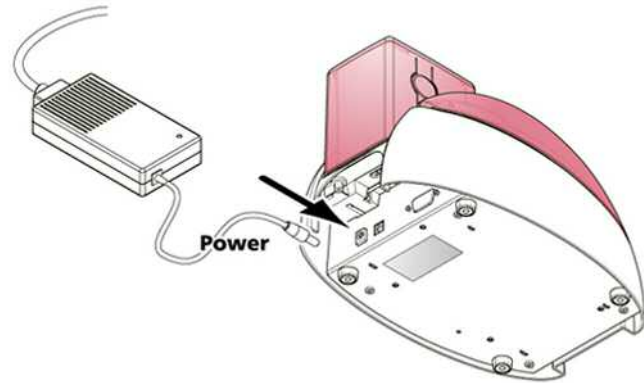
*Turn off the printer by pulling the plug out of the socket, which must always be accessible.*

*This product must be connected to an electrical installation that is correctly protected and grounded.*

*FI: Laite on liitettävä suojamaadoitus koskettimilla varustettuun pistorasiaan*

*NO: Apparatet må tilkoples jordet stikkontakt*

*SE: Apparaten skall anslutas till jordat uttag*



1. Connect the power supply cord to the power supply, then attach the power cord connector to the printer.
2. Then connect the end of the power supply cord to a grounded system outlet.
3. The printer is under power. The light on the control panel comes on and the print head rises and falls to indicate the correct mechanical working of the printer. If the light fails to come on, this means that the installation has not been carried out correctly or possibly that the printer is not working properly. Check the installation.



*Prior to any maintenance action, always disconnect the power supply cable.*



*For your own safety, these components must remain accessible at all times to permit emergency action*

This product must be connected to a correctly protected and grounded electrical installation

### Connect the USB cable

**The data USB cable must never be connected before the installation of the printer driver has been completed.**

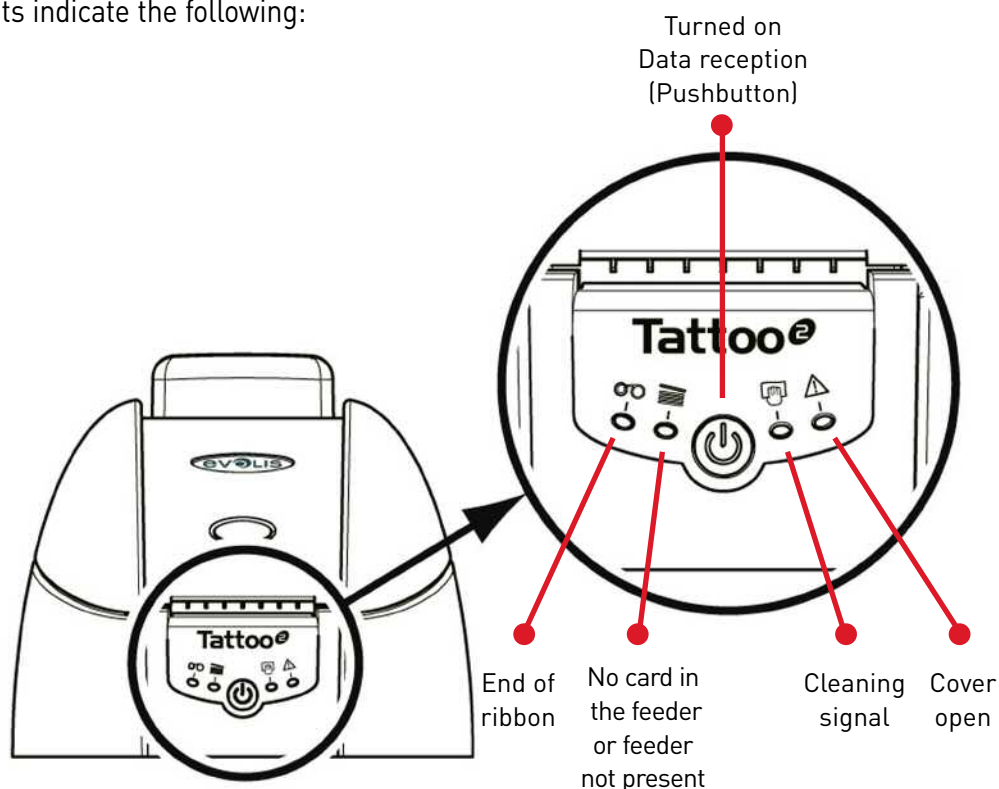
Refer to Chapter 2 and carefully follow these instructions.

# Printer control panel

A control panel is available in front of the printer.

Four lights are associated with symbols indicating the printer activity.

These lights indicate the following:



*Refer to chapter 3 of this manual for further information on interpreting the messages of the control panel.*

## Stand by



The printer automatically goes into stand-by after 10 minutes of inactivity. The light on the push button from the control panel goes out. To reactivate the printer, press the push button for one second. The light on the push button comes on.



Tattoo may be left in stand-by at any time by pressing a few seconds the push button as indicated. The light on the push button goes out.

# Install the ribbons

Tattoo uses two types of ribbons:

- Color ribbon also called multi-panel ribbon
- Monochrome ribbons available in different colors: black, red, green, blue, white, gold, silver



*The Evolis original ribbons are specially designed to guarantee optimum operation of your equipment without any risk of damage. The use of ribbons from any other source than Evolis could seriously damage the print head, consequently entailing the immediate interruption of the factory warranty.*

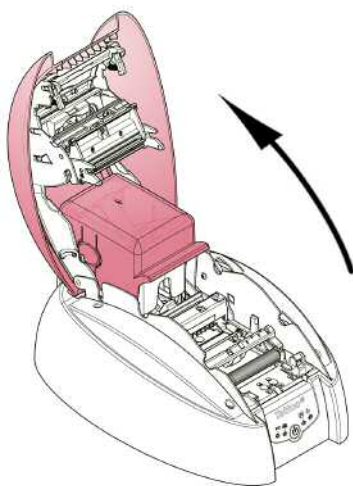
For optimum printing quality, Evolis recommends cleaning all the equipment each time a ribbon is changed. It is up to the user to make this determination, provided, however, that he makes sure to comply with the mandatory cleaning cycles in order to keep the equipment in perfect operating conditions (consult the chapter on Ordinary Maintenance).



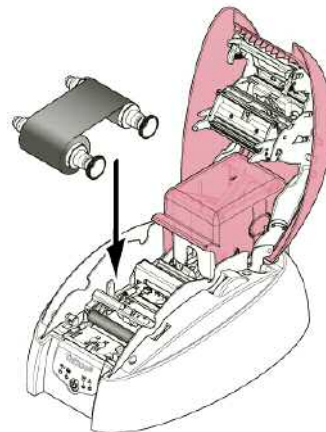
*The validity of the factory guarantee is conditional upon compliance with these cleaning cycles (cf. Limited Evolis Warranty document).*

## Monochrome or color ribbon

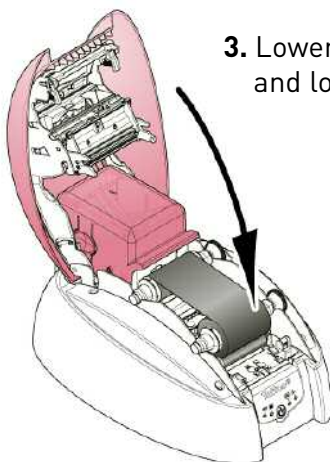
To install a monochrome or color ribbon in the print module, proceed as follows:



1. Open the cover of the printer by pressing the opening lever then turn it in vertical position.



2. Install the new ribbon in the position indicated in the diagram:
  - Toothed wheel toward the right side.
  - Part including the new ribbon located at the front.



3. Lower the cover and lock it.



*The ribbon will be automatically positioned when a new printing task is launched.*



*Installation of the print ribbons must be accompanied by adequate defining of the parameters of the print driver. Please refer to the chapters on **Properties of the Driver** for additional details.*

# Install the cards

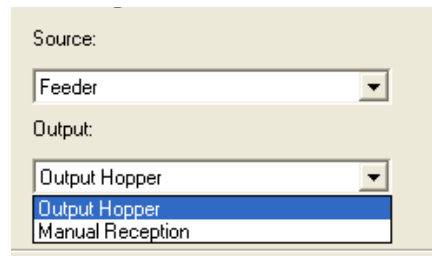
## Types of cards

Tattoo supports PVC cards varying in thickness between 0.25 mm (10 mil) and 0.76 mm (30 mil). For optimum quality, these cards must comply with CR Standard 80.



*10 mil cards must be used only for monochrome printings*

There are several feeding and ejection modes available. The driver must be set up accordingly to your needs and choice (cf Chapter 2)

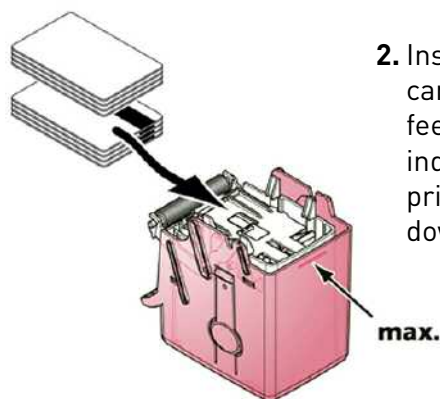


## Installation in the feeder

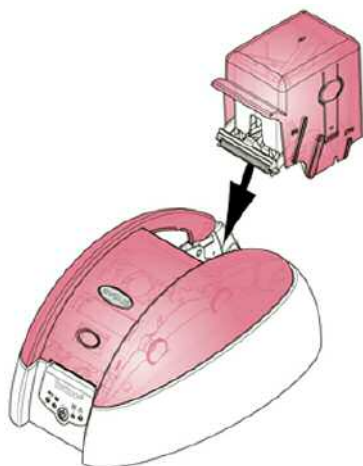
The cards are installed in the feeder as follows:



1. Remove the feeder as indicated.



2. Insert the cards into the feeder as indicated, printable face down.



3. Put the feeder back into place in the printer until it "Clicks" in place.

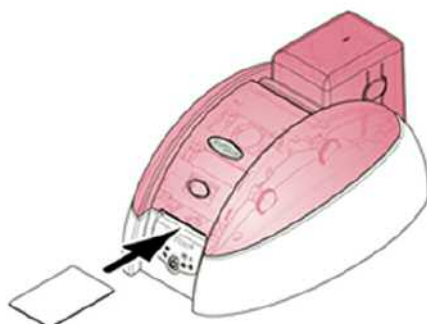


*Only use the type of cards appearing in the Technical Specifications in this manual*

*Do not touch the printable surface of the cards: the printing quality depends on this.*

*Do not use cards that are damaged, bent or that have an embossed texture. Always store the blank cards in a clean and dust-free location.*

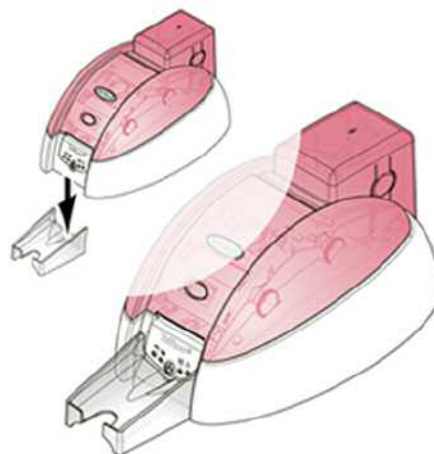
## To load a card manually from the feeding mouth :



Insert a card in the feeding mouth. The card will be automatically taken in and ejected after the printing process.

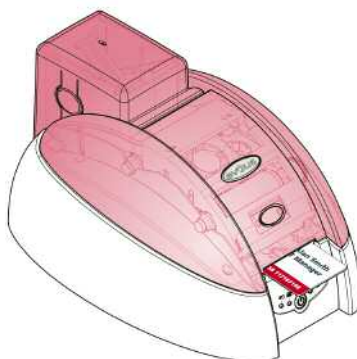
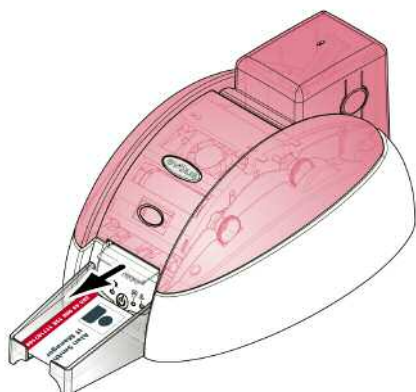
## Remove the personalized cards

The printer is delivered with a detachable output hopper with a capacity of 15 cards in 0.76 mm (30 mil) format. This is intended to receive the printed cards, and must be installed as follows.



There are 2 different modes for the card reception:

- an automatic ejection mode (in this case, it is recommended to use the detachable hopper delivered with the printer)
- a manual reception mode (the card must be collected after the printing process)



## Other stages to the installation

You have now completed the installation (material) of your Evolis printer. For the moment, we would urge you to carry on reading this manual and we would inform you that there are still two extra stages to be followed to make your Evolis printer fully operational:

- Installation of the driver
- Printer cleaning



## **2** Setting of parameters

*Defining the parameters of the printer and of its driver is a highly important step and requires very special attention. As a matter of fact, improper settings are factors that have a negative impact on the quality of personalization. It is therefore essential to proceed in stages, changing the parameters only when you are completely sure. Evolis gives you at all times the ability to return to the 'factory' settings if the adjustments made do not give the expected results.*



*Be careful about defining the personalized parameters and do not hesitate to contact your Evolis dealer to get the necessary advice and assistance prior to any modification.*

### **Windows print driver**

---

The Evolis Tattoo driver operates under Windows XP, Server 2003 and Vista 32 and 64-bits.

#### **Installation of the print driver**

To install your print driver, you will need the CD-Rom 'Drivers and Documentation' shipped with your Evolis printer.



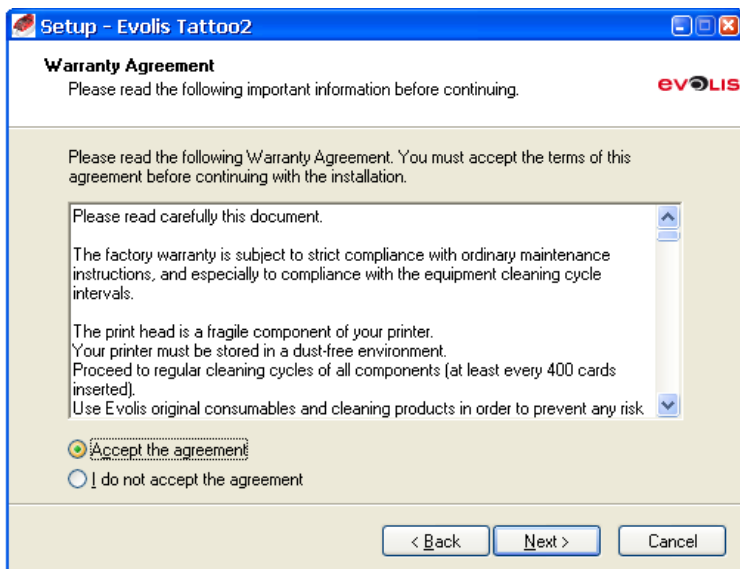
*Please make sure the USB cable is disconnected before starting this procedure.*



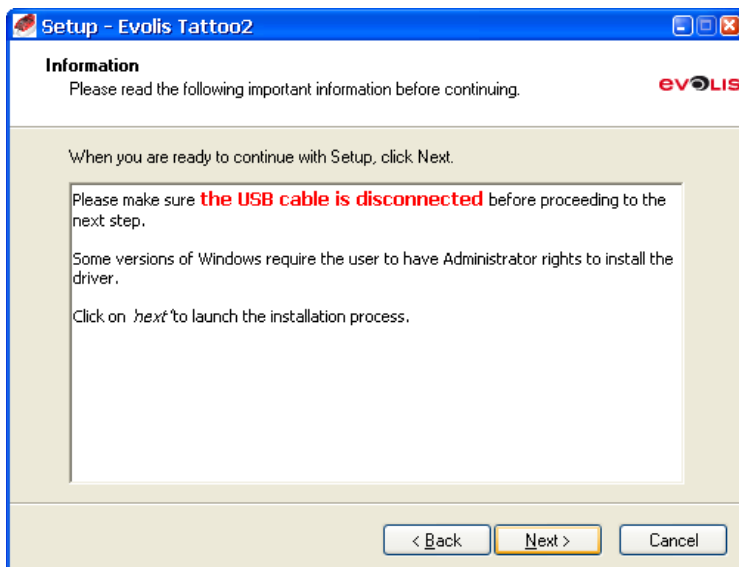
*The installation program automatically selects the version to be installed in terms of your operating system.*

1. Load the 'DRIVERS & DOCUMENTATIONS' CD-Rom in your CD drive.
2. Wait a few seconds until the welcome screen asks you to choose your language. If the CD-Rom does not launch automatically, double click on the setup.exe file located in the DRIVERS directory on the CD-Rom.
3. Select your language.
4. Click the "Install Driver" option to launch the setup program.
5. Make sure you stick precisely to the installation guidelines. Some versions of Windows may require the user to have Administrator rights to install the driver.

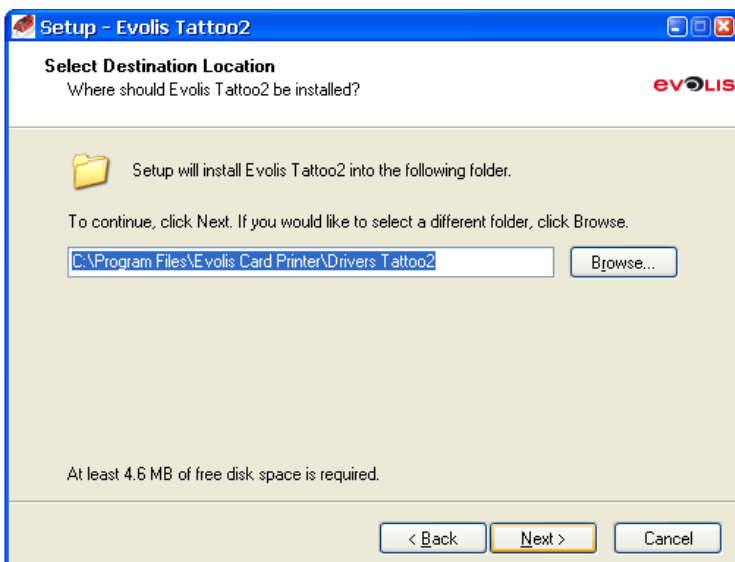
## Step 1: Accept the limited warranty conditions



## Step 2: Make sure the USB cable is disconnected



## Step 3: Destination location



## Step 4: USB cable connection



## Step 5: Printer Detection

Click 'next' and/or 'continue' if the following windows appear.





## Step 6: End of the process



*When the installation process is over, print a test card to make sure your printer operates suitably. You are now ready to use your printer.*

# Properties of the driver

Before using your printer, you must determine your personalized parameters:

- Type of ribbon for printing the cards
- Default parameter settings



*You will find more detailed information on Evolis ribbons in the 'Evolis Genuine Product' Consumables List section.*



*In general, it is recommended to retain the default parameters determined by the print driver. Modification of these parameters by an uninformed user could lead to a poor quality of personalization as well as to hardware damage. So, stay alert and contact your Evolis dealer, who will guide you in adjusting these parameters if applicable.*

These printing parameters are accessible:

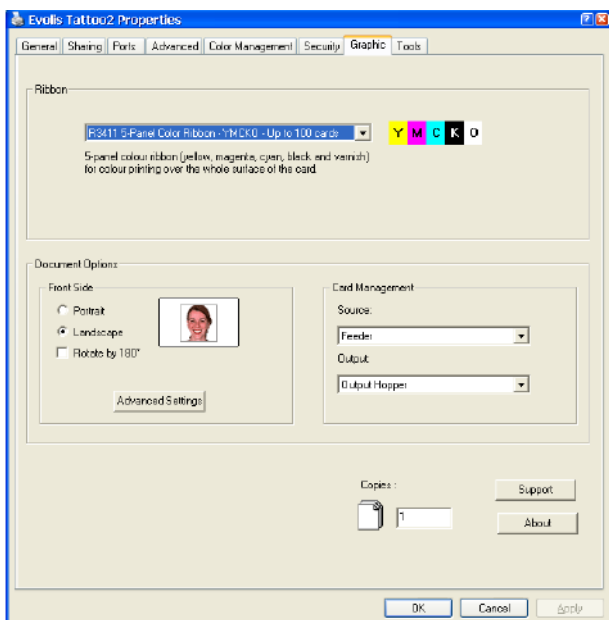
- From the **Start** button located at the bottom left on the Windows task bar: select **Printers and Faxes**.
- Choose your printer by left-clicking with the mouse, for example **Evolis Tattoo2**.
- Click again but with right mouse key to bring up a menu, and select **Properties**.

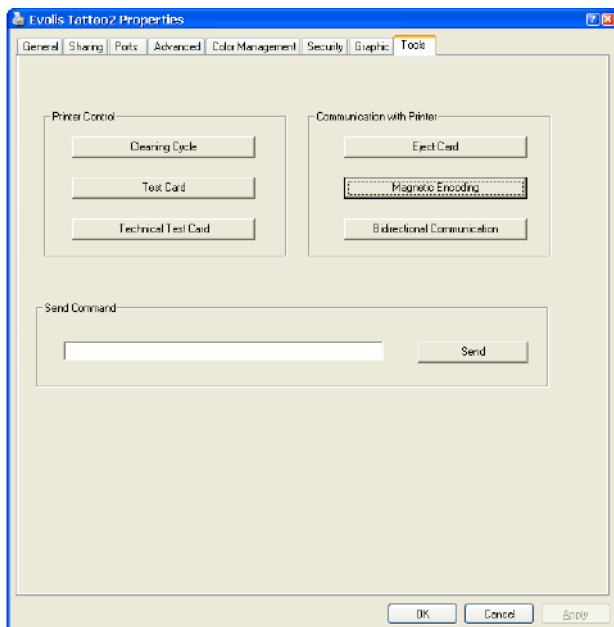
An initial screen for setting the equipment properties parameters now appears.

*The principal tabs for defining parameters are 'Graphic' and 'Tools'.*

## 'Graphic' tab

- Choice of printing mode and of the associated ribbons
- Orientation of the printed card
- Number of copies
- Adjustment of the ribbon parameters: color, black panel, overlay panel options  
*(depend on the print ribbon selected)*





### 'Tools' tab

- Setting parameters and testing of the magnetic encoding options
- Testing and diagnostic tools

### On-line help

A help file guides you in using each of the parameters of the print driver in terms of the different print modes and criteria selected.

To familiarize yourself with these different parameters, we recommend that you consult this help feature before making any changes.

### Print a test card (Tools tab)

We recommend that you print a Test Card at the time of the first use, and that you save it. This card stores data that you may be asked to provide if you call Technical Service.

### Default printer

Depending on your application, it may be important to define your Evolis printer as a default printing peripheral device.



*In that event, all your print work (not just cards but office documentation) will be sent to the Evolis printer.*

To define your default printer, proceed as follows:

- Using the **Start** button at the bottom left of the Windows task bar, select **Printers** and **Faxes**.
- Select your printer with a left mouse click, for example **Evolis Tattoo2**.
- Click again using the right mouse key to bring up a menu, and choose **Define** as default printer.

### Other tabs

- **'General' tab:** Windows information window that allows you to print a test page to monitor the computer-printer communication.
- **'Ports' tab:** Windows control window that allows you to select the printing port and to validate use of the appropriate print driver.  
The parameters displayed should be changed only by a person with advanced computer skills.
- **'Color management' tab:** This dialog box makes it possible to associate the printing with a specific color profile.
- **'Security', 'Sharing', 'Advanced' tabs:** Windows and Network parameters reserved for the system administrator of your computer system.  
Do not change without prior approval.

# Card printing configuration in an office automation application

A large number of Windows applications permit the printing of a document (for example, the tools of the Microsoft office suite: MS-Word, MS-Access, MS-Excel, MS-Power Point).

To help you familiarize yourself with formatting a card and setting the parameters for its formatting and printing, we offer the following example:

## Using Microsoft® Word

After first setting up the Evolis default printer:

- Start the MS-Word application.
- Click **File** on the menu bar, then click on **Formatting**.
- The **Paper** tab proposes **Paper format**; select type '**Card CR80**'.
- Under the **Margins** tab, set all the margins to '**0**', then under **Orientation**, select **Landscape**.
- Close the window by clicking on **OK**.

### Your Word window should now look like this:

You are ready to personalize your card by entering the different composition components:

- Logo and illustration.
- Identification photo.
- Fixed and variable text.
- Bar code, etc.



### Example:



*Please note that this example does not propose to initiate the operator on operating the MS-Word application. Its purpose is simply to establish a relationship between the graphics of a card and the parameters of the Evolis printer driver that are necessary for the printing operation.*

## Setting the parameters of the Evolis print driver from MS-Word:

- Click on **File** on the menu bar, then click on **Print**.
- The dialog box informs you that the Evolis printer has been selected. Now click on **Properties**. The Evolis printer drive dialog box appears.



The printing parameters for this graphics example are:

### 1. Graphic dialog box, select:

- Type of ribbon: R3411 - 5 Panel color ribbon - YMCKO
- Orientation: Landscape.
- Copy (number to be determined).

### 2. Advanced settings dialog box, select:

- Black panel adjustment: all black dots.
- Varnish panel adjustment: full varnish.

3. Click on **Apply** if you modify a parameter, then on **OK** to successively close each dialog box.

4. Having returned to the main window, click **OK** to start printing.

*Consult the help of each dialog box, if necessary.*

# 3 Error messages and diagnostics

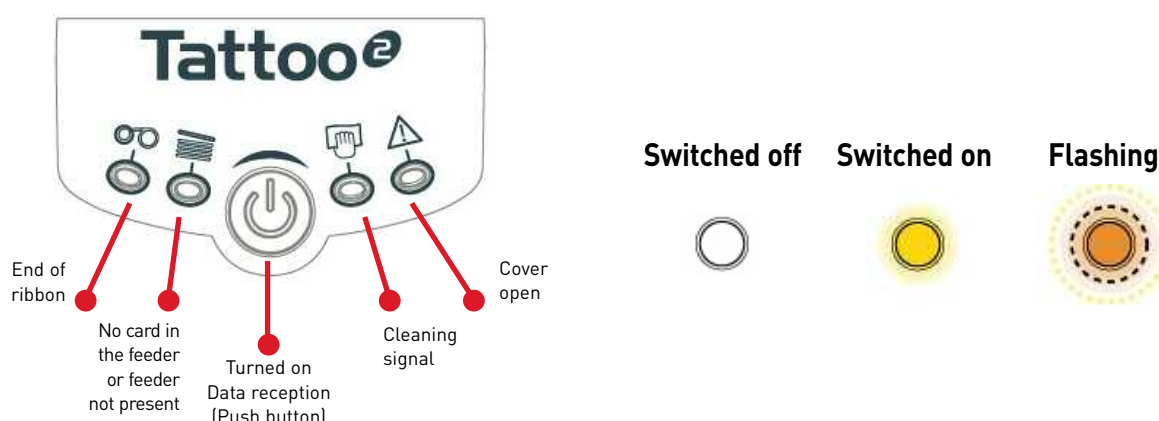
*While the Evolis Tattoo was designed to work independently, keeping your involvement to a minimum, it may nevertheless be useful to become familiar with the main alert messages.*

## Notification of messages

### Description of the printer control panel

The control panel includes 1 button and a 4-LED-type diode.

The lights on the control panel are represented in one of the following states:



The push button returns the control panel to its original state after dealing with the following cases:





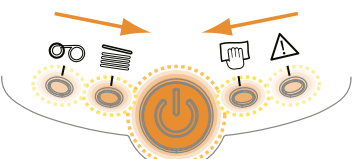

- ABSENCE OF CARD or INTERNAL PRINTER PROBLEM.
- ERROR IN MAGNETIC ENCODING.
- CARD EJECTION.






The push button also enables:

- The printer to be set to stand-by.
- A test card to be printed.
- A cleaning cycle to be started.

# Interpretation of messages

Consult the following states of the control panel to determine the activity of your Evolis printer or the nature of the problem:

State of the lights	Interpretation	Solution or explanation
	<b>PRINTER READY</b>	The printer is ready to receive data.
	<b>PROCESSING</b>	The printer receives data from one or several of its interfaces.
	<b>END OF RIBBON</b>	<ul style="list-style-type: none"> <li>There is no ribbon in the printer.</li> <li>The ribbon has finished.</li> <li>The ribbon has been badly installed in the printer.</li> <li>The ribbon is cut.</li> </ul> <p><i>Check the state of the ribbon in the printer. If you have a printing job in course, this restarts with a new card.</i></p>
	<b>NO CARD IN FEEDER OR FEEDER NOT PRESENT</b>	<ul style="list-style-type: none"> <li>There is no card in the feeder.</li> <li>The cards are curved.</li> <li>The cards are stuck together.</li> <li>The feeder is not present in the printer or is badly inserted.</li> </ul> <p><i>Check the state of the cards in the feeder or make sure that the feeder is present in the printer and correctly inserted. Then, press the push button for one second. The printing restarts</i></p>
	<b>WAITING FOR A CARD TO BE INSERTED</b>	<ul style="list-style-type: none"> <li>The printer is waiting for a card to be inserted.</li> </ul> <p><i>The printer is fitted with the manual card feeder option: insert a card in the printer. Go to chapter 1 "Install the Evolis printer".</i></p>
	<b>PRINTER CLEANING ALERT (AFTER 400 INSERTIONS)</b>	<ul style="list-style-type: none"> <li>The printer has to be cleaned.</li> </ul> <p><i>Go to chapter 4 "Servicing and Maintenance".</i></p>

State of the lights	Interpretation	Solution or explanation
	<b>PRINTER CLEANING ALERT (AFTER 500 INSERTIONS)</b>	<ul style="list-style-type: none"> <li>■ The printer must immediately be cleaned. <i>Go to chapter 4 "Servicing and Maintenance".</i></li> </ul>
	<b>PRINTER COVER OPEN</b>	<ul style="list-style-type: none"> <li>■ The printer cover is open. Close the cover of the printer. The activity in course restarts.</li> </ul>
	<b>MECHANICAL PROBLEM</b>	<ul style="list-style-type: none"> <li>■ There is a card jammed in the printing station.</li> <li>■ A mechanical part in the printer is faulty. <i>Press the push button for one second. If the problem persists, call your Evolis reseller for assistance.</i></li> </ul>
	<b>ENCODING ERROR</b>	<ul style="list-style-type: none"> <li>■ The orientation of the magnetic track in the feeder is not correct.</li> <li>■ The type of encoding has not been correctly parameterised (HICO or LOCO). <i>Go to Chapter 5 of this manual for more information.</i></li> <li>■ The encoded data do not conform to ISO 7811 or to the parameters pre-defined in the properties of the driver. <i>Go to Chapter 5 of this manual for more information.</i> <i>Press the push button for one second. The printer restarts the magnetic encoding cycle with a new card. Please check the data &amp; parameters, if the problem persists, call your Evolis reseller for assistance.</i></li> </ul>
	<b>COOLING MODE</b>	<ul style="list-style-type: none"> <li>■ The print head cooling system is activated. <i>The printer stops working for a few seconds. As soon as the print head reaches the normal working temperature, the activity starts once more.</i></li> </ul>

# Diagnostics assistance

In this chapter, you will find all the information required to perform certain simple procedures that you may be asked to do by your Evolis dealer to provide you with the most effective assistance.

## Print a test card

Printing a test card gives certain technical information about your printer and confirms its correct working. We advise you to print it when the printer is put into service and to keep it at hand.

1. Make sure there are a ribbon and a card in the printer.
2. Press the push button for three seconds. All the lights go out.
3. Press the push button once more and hold it down.
4. Release the push button as soon as the light flashes
5. The test card is printed in a few seconds (in color if the printer has a color ribbon or in monochrome if it has a monochrome ribbon).
6. The printed card is ejected into the output hopper.

## Interpret a test card

The printing of a test card gives the following information:

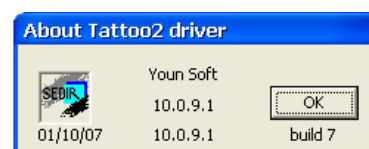
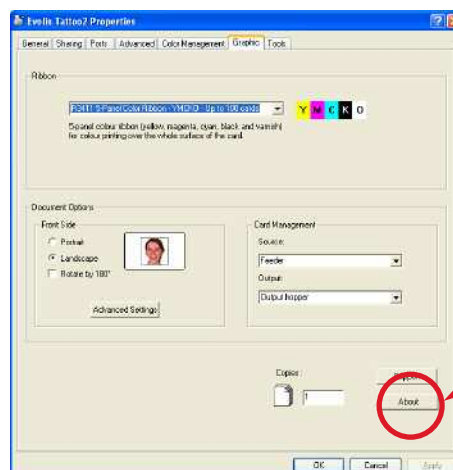
- Correct printing.
- The correct position of the ribbon in the printer.
- The printer model.
- The serial number of the printer.
- The serial number of the head printer.
- The version of the Firmware installed in the printer.



## Identify the software version installed

As indicated above, you can simply identify the software version loaded into your printer thanks to the test card (Firmware no.). You can also identify the version of the print driver installed as follows:

- Go into the driver properties (on the print driver logo, right-click and choose **Properties**)
- **Graphic** tab
- **About** button





# 4 Servicing and Maintenance

*In this chapter, we suggest that you identify the ordinary service operations for your Evolis printer that will enable you to ensure a very high quality of personalization of your plastic cards.*



## **Keep your Warranty in effect !**

*The factory warranty is subject to strict compliance with ordinary maintenance instructions, and specifically to compliance with the equipment cleaning cycle intervals.*

*Failure to comply with the procedures described in this chapter entails cancellation of the warranty on your printer and its print head.*

*Evolis will not be liable if the printer is used under non-approved maintenance conditions. Indeed, the print head is subject to wear and tear. This is a very sensitive component of the printer of which lifespan can be shortened in case the neighboring environment of the printer /print head or the cards is not dust-free.*

*The cards inserted must be clean, dustproof and with no dirt.*

*Moreover, the frequency and quality of cleanings are key in helping user extend the print head lifespan. Stick to the instructions mentioned below.*

## Ordinary maintenance

The printer is delivered with a 'starter cleaning kit'.

Evolis also provides you with the following maintenance items, available under the following reference item:

### **A5011 - UltraClean cleaning kit:**

- Five cleaning cards pre-saturated with 99% isopropyl alcohol.
- Five 99% isopropyl-based cotton swabs.
- A dispenser box of 40 pre-saturated cleaning wipes.

## Clean the card feed module



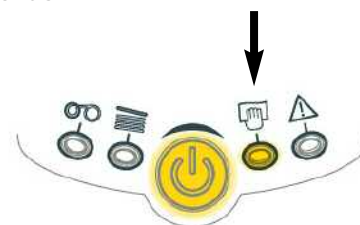
**Cleaning cycle:** every 400 cards inserted

**Maximum interval between two cleaning cycles:** 500 inserted cards



**Maintenance accessory:** pre-saturated cleaning cards

When a cleaning of the card feed module is necessary (every 400 cards printed), the cleaning light from the control panel comes on as follows:



This message is an alert that indicates to the operator that it is necessary to perform the cleaning cycle. If the printer is not cleaned after the LED illuminates, the LED will remain illuminated and will start flashing when 100 additional cards have been printed.

In that event, immediately stop the work in progress and proceed with the cleaning.



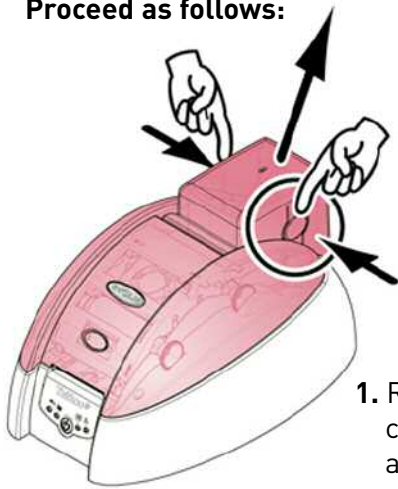
***If there is no maintenance action on your part, the message will remain posted and the factory warranty will be implicitly invalidated for failure to comply with the contractual maintenance requirements.***

To service the printer card feed system, obtain a pre-saturated cleaning card specially designed for the printer.

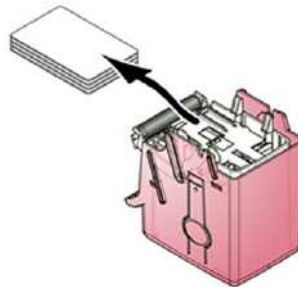
A cleaning kit including samples of these cards is shipped with your Evolis printer.

Repeated running of the card in the printer cleans the card feed rollers, the cleaning rollers, the print head and the magnetic head (if your device has one).

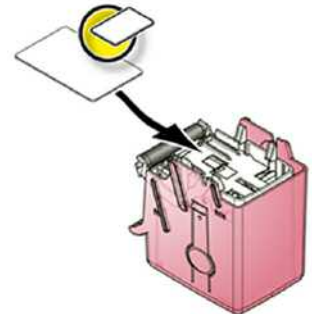
**Proceed as follows:**



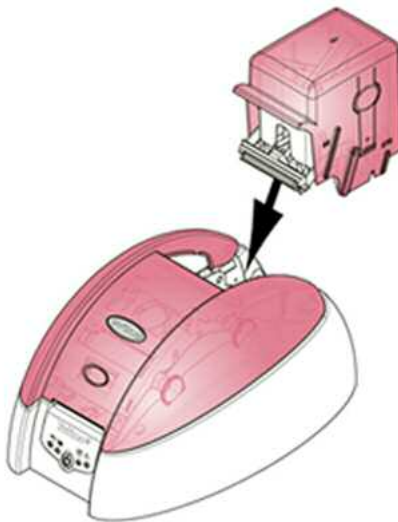
- 1.** Remove the card feeder as indicated.



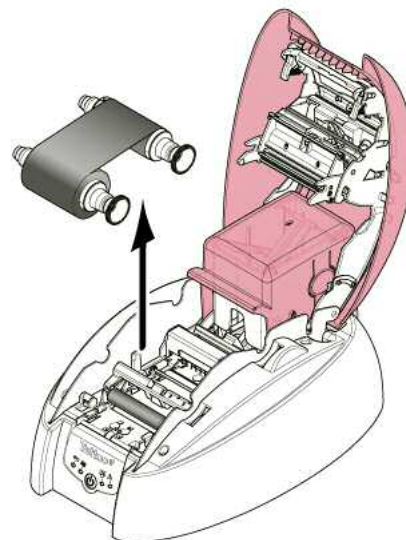
- 2.** Remove the cards that are in the feeder.



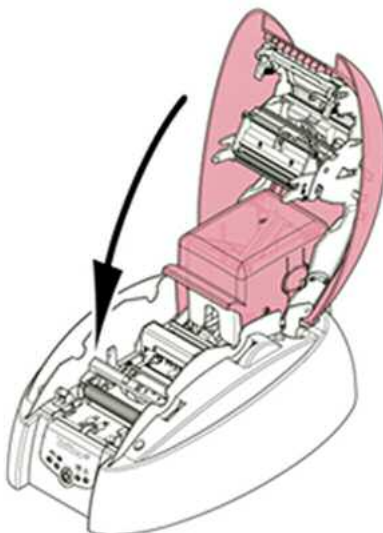
- 3.** Insert the cleaning card in the feeder as indicated.



- 4.** Put the feeder back into the printer than press on the top part of the feeder until the 'click' is heard.

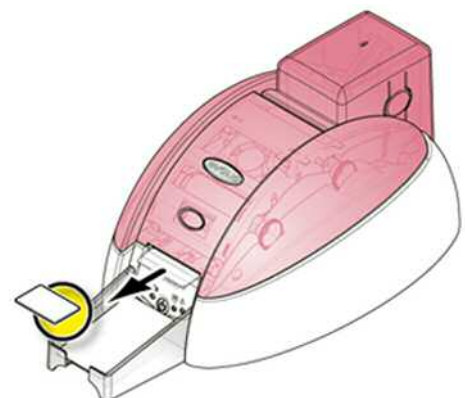


- 5.** Open the cover and remove the ribbon from the printer as shown.



- 6.** Close the cover of the printer.

- 7.** Press the push button on the control panel for a second. The cleaning starts.



- 8.** The used cleaning card is ejected in the output hopper.



Following a cleaning cycle, wait 2 minutes until all the cleaner is completely evaporated before using the printer.



Take advantage of this interruption to clean the print head (see below).



### Recommendations

Maintenance of the card feed module ensures a high quality of printing. Evolis recommends that you perform servicing on each ribbon change. Without waiting for the signal of the light of the printer, proceed as described above.

## Service the cleaning rollers

The function of the cleaning rollers is to eliminate any residual dust of the cards before they enter the feeder system.

This roller, therefore systematically becomes dirty. This is a sign of its efficacy.

If this roller remains clean, we suggest that you check its quality by contacting your Evolis dealer in order to replace it, if applicable.

To supplement the servicing of the card feeder system which is intended to clean it, you can obtain a saturated cleaning cloth and clean this component thoroughly.

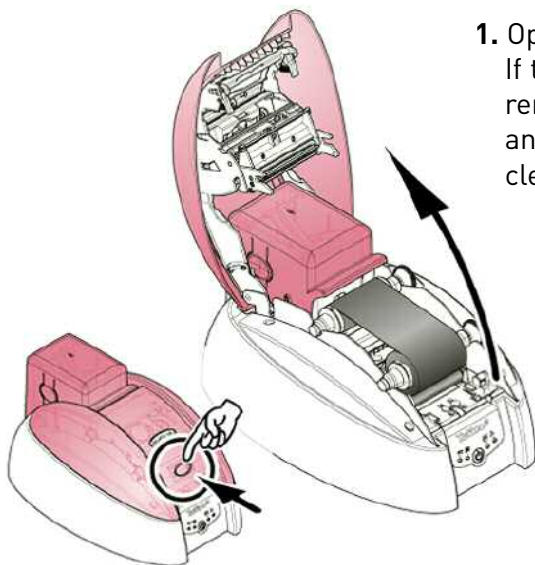


**Frequency:** on each ribbon change and after each cleaning cycle of the card feed module

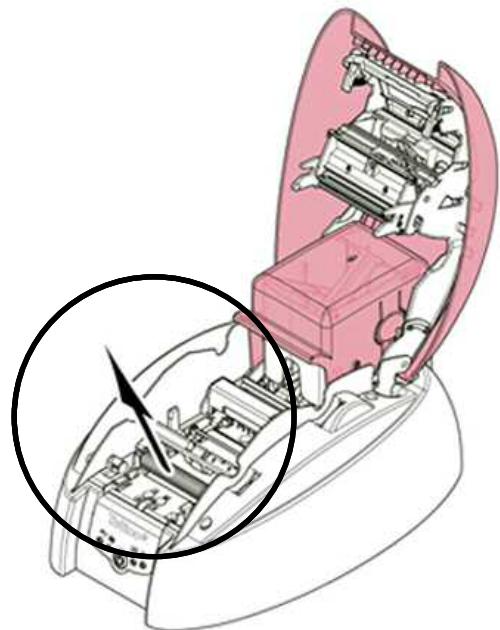


**Maintenance accessory:** cleaning cloths

**Proceed as follows:**



1. Open the cover.  
If there is one, remove the ribbon and locate the cleaning roller.



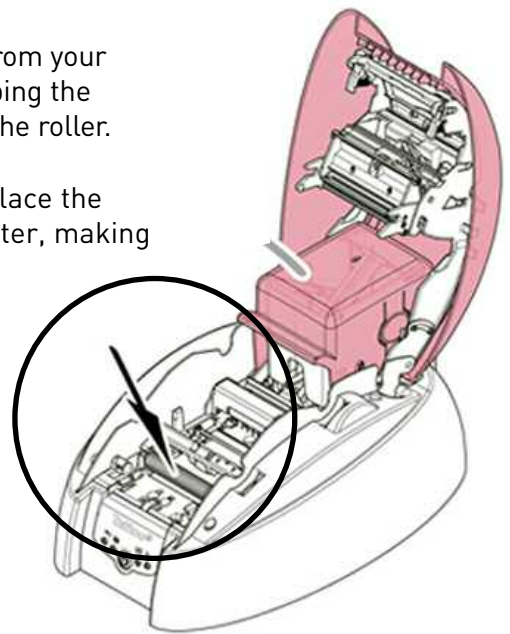
2. Release the cleaning roller from its seat.



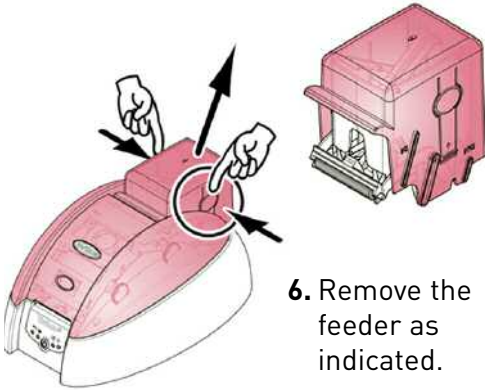
3. Clean the roller with a cleaning cloth from your cleaning kit. Eliminate all dust by rubbing the cloth lightly over the entire surface of the roller.

4. When it is dry, replace the roller into the printer, making sure it is properly positioned.

5. Put the ribbon back in its place, lower and close the cover.



6. Remove the feeder as indicated.



7. Clean the roller with the cleaning cloth & put the feeder back into place until it clicks.

8. The printer is again available for use.



After a cleaning cycle, wait 2 minutes for the cleaning fluid to evaporate completely before using the printer

## Clean the print head



**Frequency:** on each ribbon change and after each cleaning cycle of the card feed module



**Maintenance accessory:** cotton swab saturated with isopropyl alcohol

The print head is cleaned at the time the inside of the printer is cleaned (see above).

However, in order to preserve the original printing quality and to reduce the incidents created by the presence of surplus ink on the surface of the print head, it is recommended that the print head be cleaned regularly (at each ribbon change) using the cotton swabs supplied with the UltraClean cleaning kit.



*It is very important to protect the print head and any other related component handled against any electrostatic discharge.*



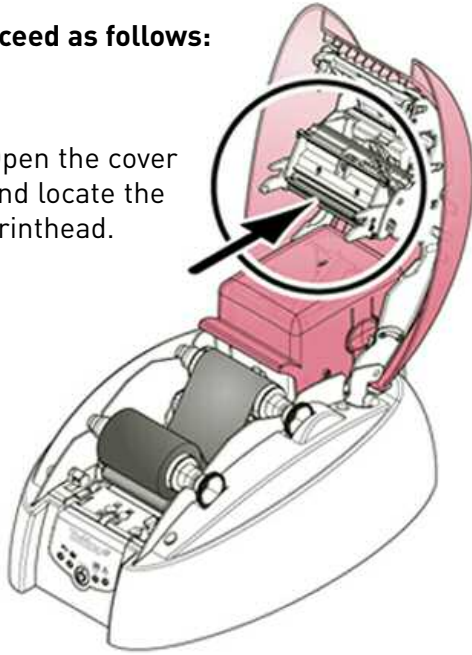
*The print head is a fragile component of your printer. To prevent any damage to it:*

- Before cleaning the print head, disconnect the printer from its power supply.
- Comply with the cleaning cycles.
- Never put the print head into contact with pointed and or metal objects.
- Avoid direct contact between the surface of the print head and the fingers. This could result in an altered print quality, or even permanent damage to the print head.

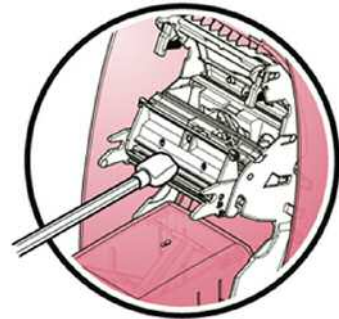


**Proceed as follows:**

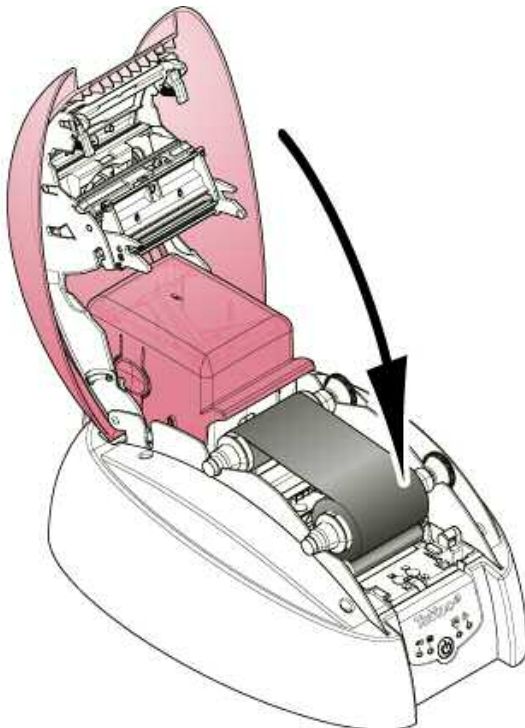
1. Open the cover and locate the printhead.



2. Take a cotton swab and press the middle of the tube until a click is heard. The cotton becomes saturated with alcohol.



3. Carefully rub the cotton swab from right to left along the print head for a few seconds.



4. Close the cover. The printer is again ready for operation.



*After a cleaning cycle, wait 2 minutes until all the cleaning fluid evaporates before using the printer.*

# Maintenance

The Evolis printers are designed to offer the user quality of personalization, ease of use and equipment longevity. However, depending on the type and volume of personalized cards as well as the operating environment, certain elements are able to be exchanged by the user.

Moreover, it is common in the computer world to do regular upgrades of the software components: the firmware and the print drivers.

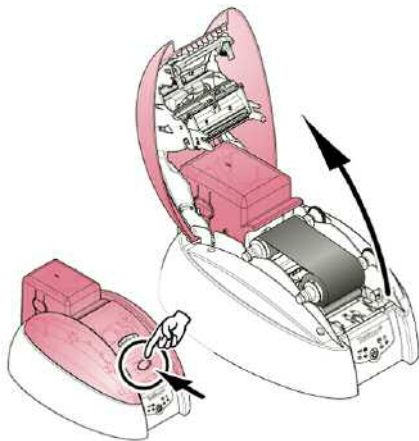
The following chapters provide information on the ordinary maintenance operations that make it possible to keep your Evolis printer in perfect working order.

## Replace the cleaning rollers

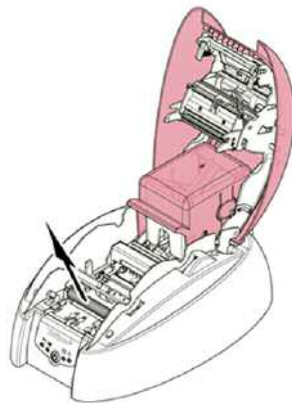
In the event your cleaning rollers become less efficient despite regular maintenance, they need to be replaced in order to keep the print head from becoming clogged and ultimately permanently damaged. (See the chapter on Service the Cleaning Roller).

The cleaning rollers are available as a consumable from your Evolis dealer.

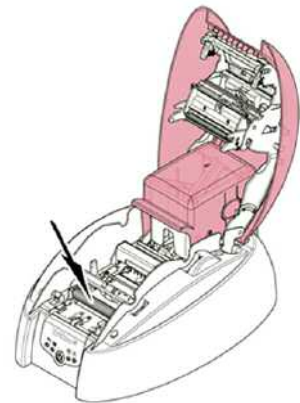
**To replace the rollers, proceed as follows:**



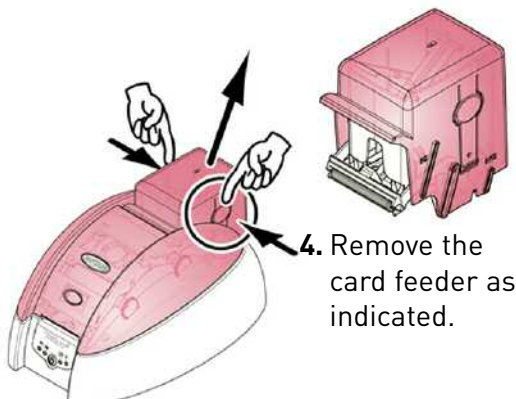
- 1.** Open the cover. If there is one, remove the ribbon.



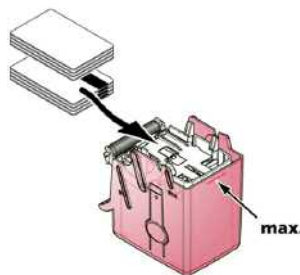
- 2.** Locate the cleaning roller and release it from its seat.



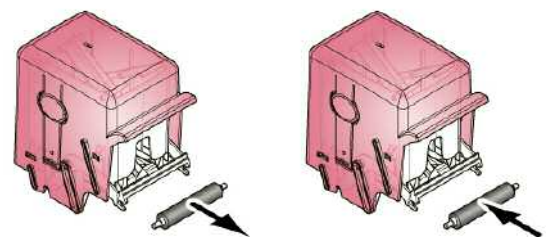
- 3.** Install the new roller into the printer, making sure that it is correctly positioned in its seat.



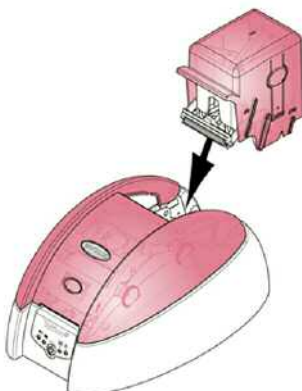
- 4.** Remove the card feeder as indicated.



- 5.** Remove the cards that are in the feeder.



- 6.** Release the cleaning roller & replace it.



- 7.** Put the cards in the feeder and the feeder back in the printer.

- 8.** The printer is ready for operation.

# Replace the print head

The print head is a sensitive component of your equipment. It determines the print quality, and its regular maintenance as well as the absence of dust in the immediate environment guarantee its longevity.

However, it can happen that this head needs to be replaced. Evolis has designed a unique device that allows the user to proceed to this exchange without using any tools by simply following the instructions very carefully.

Before doing anything else, please contact your Evolis dealer in order to check with him whether it is advisable to replace the print head.



*During the printer warranty period, Evolis has put in place a program for the replacement of defective print heads. Your equipment is eligible for this program if:*

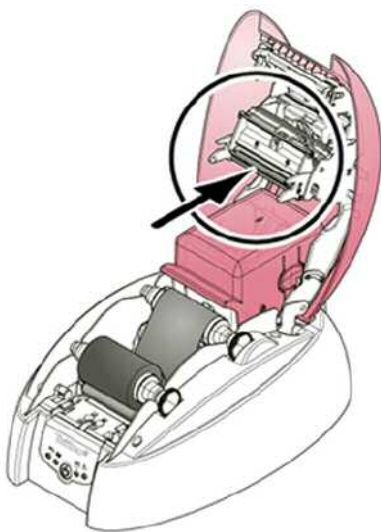
- *You use only Evolis consumables (ribbons and maintenance products).*
- *You have scrupulously complied with the equipment maintenance cycles.*
- *You work in a dust-free environment in accordance with technical specifications.*
- *You use flat cards without any rough areas that could damage the surface of the print head.*

**To complete the exchange of the print head, proceed as follows:**

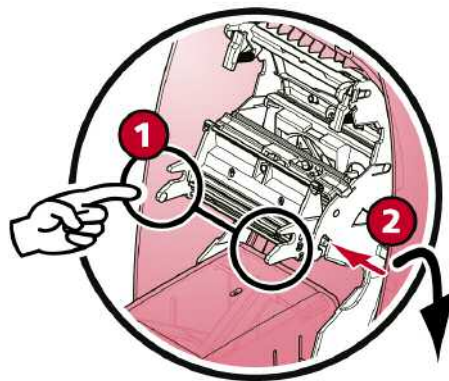


*Before changing a print head, make sure to disconnect the printer from its power supply.*

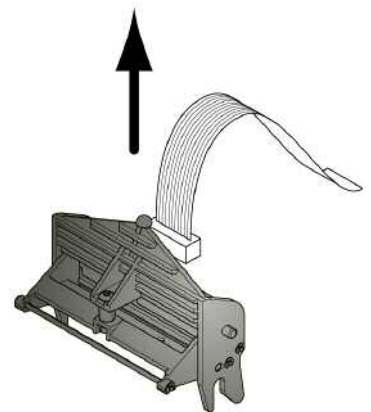
## Step 1 - Removing the defective print head



**1.** Open the cover and locate the print head.

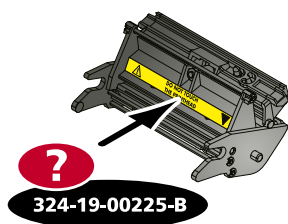


**2.** Press on the 2 holding forks (1) and pivot them round in order to pull the lugs from their seat (2).

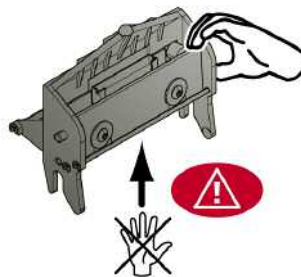


**3.** Turn the head carefully and disconnect the connector linked to the cable without forcing the mechanism.

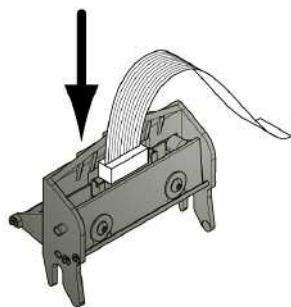
## Step 2 - Installing the new print head



1. Note the code indicated on the white ticket affixed to the print head. You will be asked for this code in Step 3.

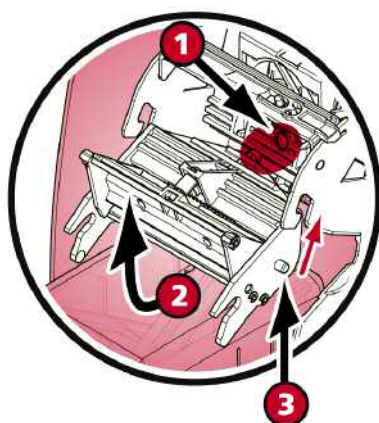
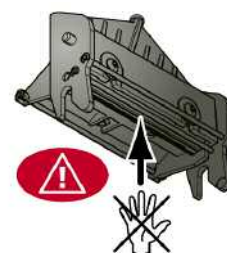


2. Pick up the new print head and turn it toward you, with the white connector visible.



3. Connect the cable into its seat, making sure it is in the correct direction. Do not force the mechanism, as this part is relatively sensitive.

4. Turn the head so that the notice is visible: the connector is no longer visible.



5. Fit in the the head horizontally by inserting the ball into its seat.
6. Turn the print head in order to insert the lugs into the lateral forks of the head bracket.
7. The head is put back in place.
8. Close the cover. The new print head is now installed.

## Step 3 - Setting the parameters of the new print head

1. Power up the printer and make sure it is properly connected to a computer on which Tattoo print driver is installed.
2. Under print driver "**Properties**", click on the "**Tools**" dialogue box.
3. In the "**Bi directionnal communication**" portion, enter the following command: **Pkn;x**

X = the print head kit number that you read in Step 2

Example: if the print head kit number is: 379-D760 2028-D, you must enter the command:  
Pkn;379-D760 2028-D

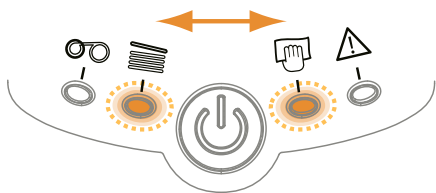


*If the print head kit number is not entered correctly, printer malfunctions can occur and the warranty may be canceled.*



## Step 4 - Cleaning the printer

On the LED control panel, the cleaning light comes on as follows:



Cleaning is absolutely required after a print head change.

No printing should be started before this operation has been completed.

Refer to the **Clean Card Feed Module** chapter to perform this operation.

Also service the cleaning roller and replace cards and ribbons.

Once the cleaning is done, your Evolis printer is again ready to personalize your cards.

## Update the Firmware

Updating the Firmware is a simple operation, but if is not carried out fully, the result can be a disabled.



*Prior to any update, please contact your Evolis dealer who can advise you as to whether or not it is appropriate to carry out this operation. In general, this type of update is required only in case of a problem or malfunction clearly identified by your Evolis dealer.*

In order to download an update from the [www.evolis.com/en/supservices/access.asp](http://www.evolis.com/en/supservices/access.asp) site, you must first have registered your product with Evolis (see chapter **Register your product** in order to benefit from updates).

1. Enter your login and password: a page is displayed.
2. Select the Tattoo2 printer model and the Firmware selection.
3. Accept the download and register the file in a directory on your hard disk.

The file is stored in compressed zip. file. You must extract it and save it in a temporary directory.

4. Then double-click on the file in the directory to start the download.
5. When asked by the program, click on the **Download** button to start the operation.  
The downloading is in process, the push button from the control panel flashes.
6. After about thirty seconds, the Firmware has been transferred to the printer, and the operation is complete. The light from the push button comes on and the print head rises and falls to indicate the correct transfer of the firmware. If the light fails to come on or flashes, this means that the transfer has not been carried out correctly or possibly that the printer is not working properly. Check the connections cables and perform a new transfer.



The update is complete, and your equipment is ready to personalize your cards.



*Never interrupt the transfer between the PC and the printer during the important downloading phase (by turning off the printer or the PC, or disconnecting a cable). The result would be the total inability to restart the printer.*

*If this ever occurs, please contact your Evolis dealer, who will replace your printer's processor card.*

## Update the print driver

The updating of the print driver is required in order to solve malfunction problems or to benefit of new options.



*Prior to any update, contact your Evolis dealer who can advise you as to whether or not it is appropriate to carry out this operation.*

In order to download an update from the **[www.evolis.com/en/supservices/access.asp](http://www.evolis.com/en/supservices/access.asp)** site, you must first have registered your product with Evolis (see chapter **Register your product** in order to benefit from updates).

1. Enter your login and password: a page is displayed.
2. Select the Tattoo2 printer model and the Drivers selection.
3. Accept the download and register the file in a directory on your hard disk.

The file is stored in compressed zip. file. You must extract it and save it to a temporary directory.

4. Then double-click on the file (Setup.exe) that you have just extracted in order to start the downloading process.

For more details on procedures, please consult the chapter on **Install the Print Driver**.

# Troubleshooting

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In this chapter, you will find out how to resolve certain problems that can arise while you are working.



*Never use a metal tool or object to work on your equipment: you run the risk of hurting yourself or damaging all or part of the equipment.*

## Free a card jammed in the printing unit



When a card is jammed in the printing unit, the LEDS from the control panel are as shown:

Work is interrupted.



*Do not turn off the unit: this would lead to a loss of the printing jobs in progress that are stored in the printer's memory.*

### Remove the card as follows:

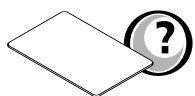
1. Open the cover of the printer and remove the ribbon.
2. Press the push button from the Control Panel to run the transportation rollers. If the card is still stuck inside the printer, push it manually towards the printer outlet. If there are several cards, always push the top one first.
3. Replace the ribbon then close the printer cover.

### To prevent card jamming:

1. Make sure that the card thickness corresponds to the specifications in the "Technical Specifications" section of this manual.
2. Check that the cards are not curved or stuck together.

## Upgrade the print quality

The following information will help you solve potential print quality problems that can arise when using your printer. If, despite this information, you cannot solve the problem, contact your Evolis dealer.



### Nothing prints

#### 1. Check your equipment's power supply

Make sure that:

- The power cord is correctly connected to the printer and to a working outlet.
- The printer is powered. The button must be illuminated.
- The power supply used is the one shipped with the printer.

#### 2. Check the card feeder and the card in the printer itself

- Verify the presence of cards in the feeder.
- Check that there is no jamming.

#### 3. Check the ribbon

- Make sure the ribbon is correctly installed and that the the cover is closed.

#### 4. Print a test card

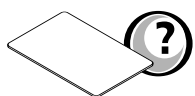
*See the chapter "Print and interpret a test card".*

#### 5. Check the printer's interface cable

- Check the connection to the computer and to the printer.
- Try using another cable of the same type.

#### 6. Check the print driver

- Check for the presence of the print driver of the Tattoo printer in the Windows parameters.
- Check the computer's printing parameters.
- Make sure the Tattoo printer is selected as the default printer.



### A blank card is ejected from the printer

#### 1. Check the ribbon

- Make sure the ribbon is not finished or cut. Replace or reinstall the ribbon, if applicable.

#### 2. Check the printer connection

- Check the printer's interface cable.
- Check the connection to the computer and to the printer.
- Try using another cable of the same type.

#### 3. Components of the print head are perhaps damaged

- Print a test card.

*If the test card does not print, contact your dealer for a replacement for the print head.*



## The print quality is not sufficient

### The type of card used may be inappropriate

- Make sure the type of cards used corresponds to the required specifications.  
*See the “Characteristics” chapter in this manual for more information.*



## The texture of the card is rough or not perfectly flat

- Try to print using another type of card.



## Partial or incorrect printing

### 1. Check the parameters defined for the printing

- Make sure no element of your formatting is outside the print margins.
- Check the orientation of the document selected in the configuration of the print driver (Landscape or Portrait).

### 2. Check the printer interface cable

- If some unusual characters print out, make sure you are using the interface cable appropriate for your printer.
- Check the connection to the computer and to the printer.
- Try using another cable of the same type.

### 3. Make sure the printer is clean

- Clean the inside of the printer, the cleaning rollers and the print head, if necessary.  
*See the “Maintenance” chapter of this manual.*

### 4. Make sure the cards are clean

- Make sure they are stored in a dust-free location.

### 5. Check the ribbon

- Make sure its position in the printer is correct.
- Make sure it is unrolling correctly.
- Make sure the ribbon is selected in the printer's driver (Graphics Tab).

### 6. Check the print head

- If horizontal (white) lines appear on the card, some components of the print head may be dirty or damaged.
- Clean the print head.  
*Consult the “Maintenance” chapter for more information.*
- If the problem is not solved after cleaning, contact your Evolis reseller for a new print head.

# Assistance



In order to assist you on a day-to-day basis, Evolis has structured its customer service around a network of specialized partners.

Moreover, to let you get answers to your questions 24/7, the Internet site [www.evolis.com](http://www.evolis.com) includes a number of elements linked to the day-to-day operation of your Tattoo.

## Network of Evolis partners

For any unresolved technical problem, contact an Evolis dealer. If you do not know of an Evolis dealer, go onto the **[www.evolis.com](http://www.evolis.com)** site and send us your request. Evolis will give you the address of the Evolis dealer closest to you. When you call an Evolis dealer, you must be next to your computer and be prepared to provide the following information:

- The type and serial number of your printer
- The type of configuration and the operating system you are using
- A description of the problem that has occurred
- A description of the steps you have taken to solve the problem.

## Look for information on [www.evolis.com](http://www.evolis.com)

If you need additional technical aid, you will find a large amount of information relative to the utilization and troubleshooting of the Evolis printers under the heading **Support & Services** on the Evolis Internet site.

This item offers the downloading of the most recent versions of Firmware, print drivers and user manuals, Evolis printer use and maintenance and an FAQ\* item to provide answers to the most frequently-asked questions.

*\*FAQ : Frequently-asked Questions*

## Register your product to benefit from updates

To benefit from driver and Firmware updates, you must pre-register on the **[www.evolis.com](http://www.evolis.com)** site.

Enter the following address into your browser in order to get access to the registration form.

**<http://www.evolis.com/en/supservices/profile.asp>**

**Register for download**

Please enter your personal and company informations then submit the form.  
Your request will be validate by an Evolis sales representative and you will receive an e-mail with your credentials.

For more information please contact the Evolis customer services Departement  
[support@evolis.com](mailto:support@evolis.com).

**The fields in red are required.**

.....

<b>Title:</b>	<input type="text" value="- Please select a title -"/>
<b>First name:</b>	<input type="text"/>
<b>Last name:</b>	<input type="text"/>
<b>Position:</b>	<input type="text"/>
<b>E-mail:</b>	<input type="text"/>
<b>E-mail confirmation:</b>	<input type="text"/>
<b>Printer Serial Number:</b>	<input type="text"/>
<b>Language:</b>	<input type="text" value="- Please select a language -"/>
<b>Company:</b>	<input type="text"/>
<b>Department:</b>	<input type="text"/>
<b>Address:</b>	<input type="text"/>



*Please fill out the entire form, making sure to complete correctly the fields in red.*

You will receive a return confirmation e-mail including your personal access codes.



# Characteristics

*This chapter covers technical specifications and certifications for the Evolis printer*

## Declaration of Conformity **Tattoo<sup>2</sup>**

### Concerning Safety and Electromagnetic Compatibility

**Manufacturer's Name:** Evolis Card Printer  
**Manufacturer's Address:** 14, avenue de la Fontaine  
Z.I. Angers Beaucouzé  
49070 Beaucouzé - France  
**Material Designation:** Tattoo2  
**Year of Manufacture:** 2007

I, the undersigned, Serge Olivier,

Declare that I have received the assumption of the above material(s), used and installed in accordance with the notice, with the essential requirements of Directives 2006/95/EC and 2004/108/EC by the application of the following regulations:



EN 60950-1 of 2001  
EN 55022 Class B of 1998: A1 (2000), A2 (2003)  
EN 55024 of 1998: A1 (2001), A2 (2003)  
EN 61000-3-2 of 2000  
EN 61000-3-3 of 2000 +A1 of 2001

**Full name:** Serge Olivier

**Title:** Technical Manager

**Date:** September 2007

**Signature:**

**EUROPE** - Norway Only: This product is designed for IT power system with phase-to-phase voltage 230V. Earth grounding is via the polarized, 3-wire power cord.

**FI:** "Laitte on liitettävä suojamaadoitus koskettimilla varustettuun pistorasiaan" - **SE:** "Apparaten skall anslutas till jordat uttag" - **NO:** "Apparatet må tilkoples jordet stikkontakt"



### FCC Statement (for U.S.A.)

#### Federal Communications Commission Radio Frequency Interferences Statement

Tattoo2 model conforms to the following specifications: FCC Part 15, Subpart A, Section 15.107(a) and Section 15.109(a) Class B digital device.

#### Supplemental information:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference's by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Use of a shielded cable is required to comply within Class B limits of Part 15 of FCC Rules.

Pursuant to Part 15.21 of the FCC Rules, any changes or modifications to this equipment not expressly approved by Evolis Card Printer may cause, harmful interference and void the FCC authorization to operate this equipment.

### VCCI (for Japan)



This is a Class B product based on the standard of the Voluntary Control Council for Interference from Information Technology Equipment (VCCI).

If this is used near a radio or television receiver in a domestic environment, it may cause radio interference. Install and use the equipment according to the instruction manual.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。  
取扱説明書に従って正しい取り扱いをして下さい。



### End of life product disposal

This symbol indicates that Waste Electrical and Electronic Equipment (WEEE) must be disposed of separately from normal household waste in order to promote reuse, recycling and other forms of recovery and to reduce the quantity of waste to be eliminated through landfill. WEEE includes accessories such as remote control, batteries, AC adaptor, etc. When you dispose of such products, please contact your distributor or Evolis at [info@devolis.com](mailto:info@devolis.com)

# Printer specifications

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## General Specifications

- Color or monochrome printing module
- 300 dpi print head (11.8 dots/mm)
- USB connection
- 16 MB RAM
- Detachable feeder with a capacity of 100 cards (0.76 mm or 30 mil)
- Detachable Output hopper with a capacity of 15 cards (0.76 mm or 30mil)
- 1-Button and 4-LED control panel
- Available in Fire red colour

## Card loading modes

- Automatic with feeder and/or hand-feed

## Print Modes

- Color dye sublimation and monochrome thermal transfer
- Integrated ribbon saver for monochrome printing

## Printing speed

Personalization throughput will depend on card design and printer settings

- YMCKO: 40 seconds/cards<sup>1</sup>
- Monochrome: 7 seconds/card<sup>1</sup>

## Supplied software

- Windows™ XP, Server 2003 and Vista (32 & 64 bits)

## Supported platforms

- eMedia Trial - 30 days evaluation

## Ribbon types

- 5-panel YMCKO color ribbon - up to 100 cards/roll
- Monochrome ribbons (available in black, red, green, blue) - Up to 600 cards/roll.
- Monochrome ribbons (available in white, gold and silver) - Up to 500 cards/roll.
- BlackWAX monochrome ribbon (for ABS & special varnished plastic cards) - up to 600 cards / roll.

## Options

- 100-card additional feeder
- Cleaning kits.

## Warranty

Use Evolis Genuine products for best performance and extended lifespan of your printer

- Printer, print head: 1 year warranty, unlimited number of passes<sup>2</sup>



<b>Card types</b>	All PVC, Composite PVC cards, PET, ABS <sup>1</sup> & Varnished <sup>1</sup> cards
<b>Card format</b>	ISO CR-80 - ISO 7810 (53.98 mm x 85.60 mm - 3.375" x 2.125")
<b>Card thickness</b>	From 0.25 mm (10 mil) <sup>3</sup> to 0.76 mm (30 mil)
<b>Card feeder capacity</b>	100 cards (0.76 mm-30 mil), 300 cards (0,25mm-10 mil)
<b>Card output hopper capacity</b>	15 cards (0.76 mm-30 mil), 45 cards (0,25mm-10 mil)
<b>Printer size</b>	<b>Height</b> 166 mm (6.53") <b>Length</b> 290 mm (11.42") / 368 mm (14.49") with the detachable hopper <b>Width</b> 187 mm (7.36")
<b>Printer weight</b>	2.4 kg (5.3 lbs)
<b>Connections</b>	USB (Cable supplied)
<b>Electrical</b>	Power supply: 100-240 V, 50-60Hz, 1.5 or 1.8 A Printer: 24 Volts DC, 3 A
<b>Environmental</b>	Min/Max operating temperature: 15° / 30°C (59° / 86° F) Humidity: 20% to 65% non-condensing Min/Max storage temperature: -5° / +70°C (23° / 158° F) Storage humidity: 20% to 70% non-condensing Operating ventilation: free air

<sup>1</sup> Under specific conditions

<sup>2</sup> Subject to observance of specific conditions and use of Evolis Genuine Consumables

<sup>3</sup> 0.25 mm (10 mil) cards must be used only for monochrome printings

# List of “Evolis Genuine Product” consumables

## Part Number Description

### Multi Panels Color Ribbon

R3411	5-Panel Color Ribbon (YMCKO) - Up to 100 cards / roll
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### Monochrome Ribbons

R2211	Black Monochrome Ribbon - Up to 600 cards / ribbon
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R2212	Blue Monochrome Ribbon - Up to 600 cards / ribbon
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R2213	Red Monochrome Ribbon - Up to 600 cards / ribbon
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R2214	Green Monochrome Ribbon - Up to 600 cards / ribbon
-------	--

R2215	White Monochrome Ribbon - Up to 500 cards / ribbon
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R2216	Gold Monochrome Ribbon - Up to 500 cards / ribbon
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R2217	Silver Monochrome Ribbon - Up to 500 cards / ribbon
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### Special Ribbon

R2219	BlackWAX Monochrome Ribbon - Up to 600 cards / ribbon
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*Aimed at printing on ABS and rough surface*

# List of Plastic Cards

## Part Number Description

C4001	Classic Blank White plastic cards - 0.76 mm (30 mil) 5 packs of 100 cards
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C4002	Classic Blank White plastic cards - 0.50 mm (20 mil) 5 packs of 100 cards
-------	--

C4003	Classic Blank White plastic cards with a HICO Magnetic Stripe - 0.76 mm (30 mil) 5 packs of 100 cards
-------	--

C4004	Classic Blank White plastic cards with a LOCO Magnetic Stripe - 0.76 mm (30 mil) 5 packs of 100 cards
-------	--

C1001	Premium Blank White plastic cards - 0.76 mm (30 mil) 5 packs of 100 cards
-------	--

C1003	Premium Blank White plastic cards with a HICO Magnetic Stripe - 0.76 mm (30 mil) 5 packs of 100 cards
-------	--

C1004	Premium Blank White plastic cards with a LOCO Magnetic Stripe - 0.76 mm (30 mil) 5 packs of 100 cards
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# List of Evolis Tattoo Accessories

## Part Number Description

A5011	Ultra Clean cleaning kit 5 pre-saturated cleaning cards, 5 swabs, 1 box of 40 pre-saturated cleaning cloths
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S5304FR	Additionnal 100-card feeder
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A5017	USB interface cable
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A5008	Power supply
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A5009	Power cord, 220V
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A5010	Power cord, 110V
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A5019	Power cord, UK
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# Magnetic encoding

Tattoo printer with a magnetic stripe card encoder is called Tattoo Mag. The operating mode of a Tattoo Mag printer is identical to that of a Tattoo Basic printer.

The magnetic encoder encodes tracks ISO 1, 2, 3 and custom in a single passage and then checks the data. Set in high coercivity (HICO) or in low coercivity (LOCO) with a simple click from the Windows driver, however, the encoders of the Tattoo Mag are sent adjusted to high coercivity (HICO) by default, unless specifically requested on the order.

## Location of the magnetic encoder

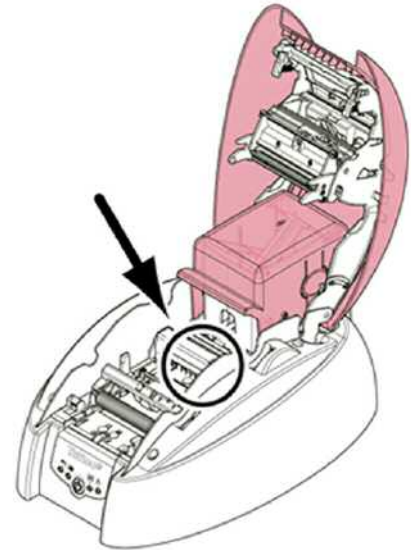
The magnetic encoder is a module installed in the factory on Tattoo Mag printers. The writing and reading head is placed under the path of the cards and after the print head.



*The encoding sequence of a card is still carried out before printing.*

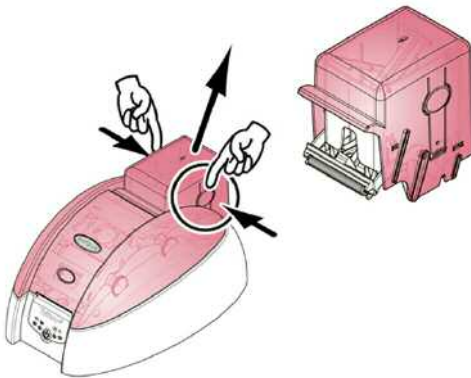


*Only use cards with magnetic tracks conform to ISO 7810 and ISO 7811. To work properly, the magnetic track must be moulded in the card. Never use a card with a glued magnetic track.*

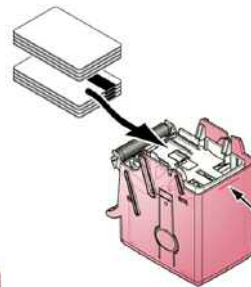


## Card orientation

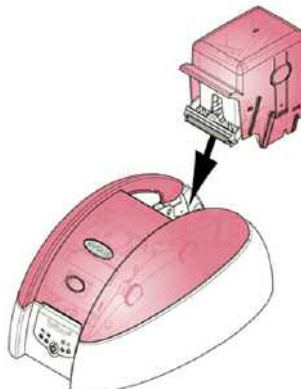
Cards with a magnetic track must be installed in the feeder so the magnetic strip faces upwards, as follows:



1. Remove the feeder from the printer as shown.



2. Lower the spring system as shown and insert 100 magnetic cards of 0.76 mm (30mil) at most.

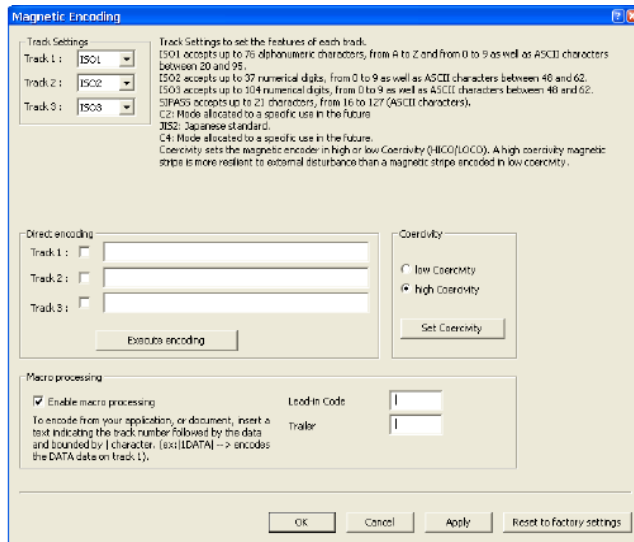


3. Put the feeder back in the printer. Then press on the top of the feeder until it clicks.

## Setting the Windows Driver

When first installing the Windows driver, it is necessary to parameterise the functions of the magnetic encoder. The functions of the magnetic encoder are accessible from the **Tools** dialog box of the driver by clicking the **Magnetic Encoding** button.

## “Magnetic Encoding” dialog box



**Track settings** allows us to choose the ISO standard required for each track. See the table in this Chapter for the information concerning the ISO 7811 standards.

**Coercivity** parameterises the magnetic encoder in high (HICO) or low (LOCO) coercivity. A magnetic track encoded in high coercivity is more resistant to exterior disturbances than a magnetic track encoded in low coercivity.

**Direct encoding** allows the direct encoding of one or more magnetic tracks from this window simply by selecting them and entering the data to be encoded. Click on the “**Execute encoding**” button to start the encoding cycle.

**Automatic extraction** allows cards with magnetic tracks to be encoded from Windows applications (such as Word or Card 5 for example). A text field surrounded by the characters “|” and “|” (or another character to be defined by the user) may be interpreted as an encoding command by the driver.

## Cleaning of the magnetic encoder

The head of a magnetic encoder needs regular cleaning to be able to assure the integrity of the data encoded in the cards.

The magnetic encoder is cleaned when the printer is the object of a cleaning sequence with the pre-saturated cards (refer to the “Servicing and Maintenance” chapter in this manual for further information).

Repeated passages of the cleaning card inside the printer clean the card transport rollers, the cleaning roller and the reading / writing head of the magnetic encoder.

If between two printer cleaning sessions (every 400 cards printed), the reading/writing process has failed with more than one card, it is recommended to manually start a printer cleaning process (refer to the “Servicing and Maintenance” chapter of this manual for the procedure to be followed).

## ISO 7811-2 encoding standards

Track no.	Field separator	Track density	Types of characters	Number of characters
Track 1	^	210 bpi <sup>1</sup>	Alphanumeric (ASCII 20- 95) <sup>2</sup>	79 <sup>3</sup>
Track 2	=	75 bpi <sup>1</sup>	Numerical (ASCII 48-62) <sup>2</sup>	40 <sup>3</sup>
Track 3	=	210 bpi <sup>1</sup>	Numerical (ASCII 78-62) <sup>2</sup>	107 <sup>3</sup>

<sup>1</sup> Bit(s) per inch

<sup>2</sup> Except the “?” character

<sup>3</sup> Including the Start, Stop and LRC characters. The magnetic encoder generates these characters automatically.

